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VIETNAM VETERANS

Decades later, another look at rates of PTSD among Vietnam Veterans

Research on Vietnam-era Veterans has produced some of the field's most valuable data on the impact of trauma and PTSD. Although 40 years have passed since the end of the Vietnam War, researchers continue to follow the Vietnam Veteran cohort to learn about PTSD over the lifespan. A recent study led by investigators at VA Puget Sound took an updated look at PTSD prevalence in aging Vietnam Veterans. The study included 5,598 Veterans from the Vietnam Era Twin Registry. Participants completed a mail-in survey and a telephone assessment that used the Composite International Diagnostic Interview (CIDI) to diagnose PTSD. Investigators calculated current (12-month) PTSD prevalence, stratifying by theater service and age. Prevalence was higher among theater Veterans (12.8%) than non-theater Veterans (5.6%). Prevalence was even higher among theater Veterans with medium or high combat exposure, who were approximately 4 times more likely to be diagnosed with PTSD than Veterans with low or no combat exposure. Prevalence also differed by age: Veterans younger than 60 years old had higher current PTSD prevalence than Veterans over age 60. Combat exposure and theater service are known risk factors for PTSD, though it is less obvious why PTSD was more common among younger Vietnam Veterans. This study confirms that even as the Vietnam War moves further into our country's past, PTSD remains a present day problem for some Vietnam Veterans.

Read the article: http://dx.doi.org/10.1016/j.jagp.2015.05.004

Goldberg, J., Magruder, K. M., Forsberg, C. W., Friedman, M. J., Litz, B. T., Vaccarino, V., ... Smith, N. L. (in press). Prevalence of posttraumatic stress disorder in aging Vietnam-era Veterans: Veterans Administration Cooperative Study 569: Course and consequences of posttraumatic stress disorder in Vietnam-era Veteran twins. *The American Journal of Geriatric Psychiatry*. PILOTS ID: NA

TREATMENT

Evaluating approaches to e-mental health

Innovative technology-based approaches in mental health care, or e-mental health, offer the promise of increasing access to information and treatment, yet research is needed to establish the feasibility and efficacy of these innovations. Three new studies examined outcomes from three different approaches to e-mental health that varied in format and level of clinician involvement – a mobile phone app, an online writing portal, and a stepped-care intervention incorporating online technology. A fourth study investigated Veterans' interest in using various e-mental health options.

Investigators from the National Center for PTSD evaluated the *PTSD Coach*, a mobile phone app designed for Veterans, Servicemembers, and civilians. It offers education, self-assessment, symptom management tools, and support resources. The research team analyzed mobile analytics data from all available downloads of the app (N = 153,834) since its release in 2011. Qualitative analysis of 156 user reviews revealed that a majority (58.3%) indicated being satisfied with the app. Out of 22 reviews that mentioned the military status of the user, 73% were posted by Servicemembers or Veterans. More than a quarter (28.6%) of users were still accessing the app 3 months after download, and 1 in 10 (10.6%) were accessing it after a

year. On average, users opened the app 6.3 times, returning to access the self-assessment (61.7%) and symptom management (53.4%) tools most often. The symptom management tools were perceived as helpful, as indicated by available pre- to post-use ratings of momentary distress and reviews.

Read the article: http://www.ptsd.va.gov/professional/articles/article-pdf/id44576.pdf

In the second study, investigators from the Minneapolis VA randomized 1,292 OEF/OIF/OND Veterans who reported difficulty readjusting to civilian life to engage in online expressive writing, online factual writing, or no intervention. Writing occurred for 20 minutes on four days. The expressive writing group wrote about their thoughts and feelings related to their transition to civilian life, while the factual writing group wrote about specific topics related to VA services and Veterans. Narratives were reviewed for safety concerns and adverse events; there were none. Compared to factual writers, expressive writers reported greater post-writing increases in negative emotions and produced narratives that were more personal and emotionally revealing. The investigators hypothesized that these outcomes indicate emotional/cognitive processing. Although expressive writing was better than no writing for all outcomes except life satisfaction (*d*s = .17 to .35), the writing groups did not differ on PTSD, reintegration difficulty, social support, or life satisfaction at either 3- or 6-months. Expressive writing was more effective than factual writing for physical complaints, anger, and general distress at 6 months (*d*s = .13 - .20). What additional care participants may have sought in those 6 months is unknown.

Read the article: http://www.ptsd.va.gov/professional/articles/article-pdf/id44574.pdf

The third study, led by investigators from the University of Washington, enrolled 121 patients admitted to a trauma center inpatient surgical ward or emergency room due to injury and who had a PCL-C ≥ 35. Participants were randomized to receive either usual care or a technology-enhanced stepped-care intervention and followed for 6 months. All participants received a study laptop that contained a bookmark for the website afterdeployment.org, which contains resources and self-management tools for trauma, injury, and other issues relevant to all audiences. The stepped-care intervention began with psychoeducation and care coordination with a care manager, including guidance navigating the laptop and using afterdeployment.org and its accompanying smartphone app, LifeArmor. The usual care group did not receive any guidance on using the laptop. Stepped care included medication, Motivational Interviewing, and CBT elements, provided in a stepped fashion based on repeated assessments using a computerized decision support tool. Compared with participants in usual care, those in stepped-care were more likely to use afterdeployment.org, take antidepressant medication, and receive an adequate dosage of antidepressant medication. The stepped-care group was also more satisfied with their care, and reported greater (although modest) improvement in PTSD at 3- and 6-months.

Read the article: http://dx.doi.org/10.1002/jts.22041

In the last study, investigators from Pacific Islands VA and the VA New England MIRECC analyzed 600 surveys from OEF/OIF Veterans and National Guard members randomly drawn from Hawaii rosters. Participants were asked whether they would be willing to use any one of seven e-mental health services, including videoteleconferencing in their home or a clinic, online computer-based interventions, text and email messages, telephone calls, and social networking with a peer group. Willingness was highest for telephone calls (56.7%) and lowest for text messages (32.2%). Among the 118 participants with probable PTSD (PCL-C ≥ 35), the three approaches with the highest interest were telephone calls (37.6%), social networking (34.8%), and online interventions (30.9%). Unexpectedly, analyses predicting an aggregate willingness to use score found that participants with probable PTSD (versus not) and those wanting mental health help within the past 3 months (versus not) reported less willingness to use e-mental health.

Read the article: http://dx.doi.org/10.1682/JRRD.2014.04.0113

These studies illustrate the diverse ways that technology can be used for e-mental health. They suggest interest in this modality is significant, but that we cannot assume that all Veterans or Service Members want to use e-health—and even if they do, what approaches they prefer. The three intervention studies also suggest that benefits are modest. None of the studies reported costs

Take NOTE

The impact of Prolonged Exposure on comorbid conditions

A new literature review examined randomized controlled trials of PE for PTSD that included data on disorders and symptoms that frequently co-occur with PTSD. Overall, investigators found that PE either improved secondary outcomes (e.g., depression, functioning) or at least did not worsen them (e.g., substance abuse, suicidality). The article is one of seven that represents the Topical Collection on Disaster Psychiatry: Trauma, PTSD, and Related Disorders of *Current Psychiatry Reports*.

Read the review: http://dx.doi.org/10.1007/s11920-015-0549-1

van Minnen, A., Zoellner, L., Harned, M., & Mills, K. (2015). Changes in comorbid conditions after Prolonged Exposure for PTSD: A literature review. *Current Psychiatry Reports, 17*, 1-16. PILOTS ID: 44573

associated with production and delivery, however, making it difficult to know the true public health value of these approaches. Being able to increase access to even modestly effective (and cost-effective) interventions could have a significant population impact.

Owen, J. E., Jaworski, B. K., Kuhn, E., Makin-Byrd, K. N., Ramsey, K. M., & Hoffman, J. E. (2015). mHealth in the wild: Using novel data to examine the reach, use, and impact of PTSD Coach. *JMIR Mental Health, 2*, e7. PILOTS ID: 44576

Sayer, N. A., Noorbaloochi, S., Frazier, P. A., Pennebaker, J. W., Orazem, R. J., Schnurr, P. P., ... Litz, B. T. (2015). Randomized controlled trial of online expressive writing to address readjustment difficulties among US Afghanistan and Iraq War Veterans. *Journal of Traumatic Stress, 28*, 381-390. PILOTS ID: 44574

Whealin, J. M., Seibert-Hatalsky, L. A., Howell, J. W., & Tsai, J. (2015). E-mental health preferences of Veterans with and without probable posttraumatic stress disorder. *Journal of Rehabilitation Research and Development, 52*, 725-738. PILOTS ID: 44577

Zatzick, D., O'Connor, S. S., Russo, J., Wang, J., Bush, N., Love, J., ... Eaton, E. (2015). Technology-enhanced stepped collaborative care targeting posttraumatic stress disorder and comorbidity after injury: A randomized controlled trial. *Journal of Traumatic Stress, 28*, 391-400. PILOTS ID: 44575

VA outperforms private sector on quality of medication treatment for mental health

VA strives to meet the mental health needs of Veterans and uses various performance metrics to gauge whether VA care is improving from one year to the next. But, how is VA performing relative to other healthcare systems? Investigators at the RAND Corporation took a close look at the quality of pharmacotherapy for psychiatric patients within and outside VA. The study used administrative databases to extract health information on approximately 850,000 VA patients and 550,000 privately insured patients diagnosed with PTSD, depression, substance use disorders, schizophrenia, or bipolar in 2007. Investigators compared VA and private sector patients on seven indicators of medication treatment quality, such as whether patients received appropriate lab tests or filled their prescriptions. On every indicator, VA outperformed the private sector. For example, 86.9% of VA patients received lab tests, compared with 49.7% in the private sector. And VA patients with depression were nearly twice as likely as their private sector counterparts to fill a 12-week antidepressant prescription. The study did not look at the quality of medication treatment for PTSD specifically. However, over a third of the VA patients had PTSD (compared with 4.5% of private sector patients), so the promising results seen in the VA sample reflect, in part, care received by PTSD patients.

Read the article: http://dx.doi.org/10.1176/appi.ps.201400537

Watkins, K. E., Smith, B., Akincigil, A., Sorbero, M. E., Paddock, S., Woodroffe, A., ... Pincus, H. A. (2015). The quality of medication treatment for mental disorders in the Department of Veterans Affairs and in private-sector plans. *Psychiatric Services*. Advance online publication. PILOTS ID: 44578

Do prescription stimulants increase risk for PTSD in Servicemembers?

Levels of the neurotransmitter norepinephrine are elevated in PTSD. Stimulants, which are often prescribed to treat ADHD or improve cognitive performance, increase norepinephrine. Therefore, some researchers have suggested that stimulants may exacerbate PTSD symptoms. Using data from the Millennium Cohort Study, investigators with the Naval Health Research Center put this hypothesis to the test. In the study, 25,971 Servicemembers completed the PCL-C during an initial assessment and two follow-up assessments over the next 5-7 years. Five percent of the sample developed new onset PTSD during the study, meaning they were PTSD-negative at the initial assessment but met PTSD criteria at a later assessment. Investigators used military pharmacy databases to determine which patients were prescribed stimulants during the study period (2001-2008). Those who received a stimulant prescription were more likely to develop new onset PTSD (hazard ratio = 5.09). The more prescriptions dispensed and the longer the cumulative days supply, the greater the risk. In light of recent research showing that the stimulant methylphenidate may actually improve PTSD (see the October 2015 *CTU-Online*), it will be important to better understand when—or in which contexts—stimulants may either exacerbate or reduce PTSD symptoms.

Read the article: http://dx.doi.org/10.1002/jts.22052

Crum-Cianflone, N. F., Frasco, M. A., Armenta, R. F., Phillips, C. J., Horton, J., Ryan, M. A., ... LeardMann, C. (2015). Prescription stimulants and PTSD among US Military Service Members. *Journal of Traumatic Stress, 28*, 585–589. PILOTS ID: 44579

ECT reduces symptoms and suicidality in patients with comorbid PTSD and depression

Early approaches to electroconvulsive therapy (ECT) caused serious side effects and presented safety risks. Today, thanks to improved delivery methods, ECT is safe and effective for severe, treatment-refractory depression. Reports of use in comorbid depression and PTSD exist but there is little information about efficacy. Recently, investigators at the Captain James A. Lovell Federal Healthcare Center examined the long-term benefits of ECT for co-occurring depression and PTSD. The study included 92 patients with PTSD and major depressive disorder who received ECT at a single hospital between 2004 and 2013. Investigators compared ECT patients to patients with PTSD and MDD treated with antidepressants (n = 3,393) and to a healthy group without either diagnosis (n = 18,769). ECT patients showed more improvement than the antidepressant group in PTSD and MDD, though the effect was stronger for depressive symptoms. The study did not report whether ECT improved only those PTSD symptoms that overlap with MDD, or if trauma-specific symptoms (like flashbacks and trauma-related nightmares) also responded. Over an 8-year interval, rates of death (9.7%) and suicide (2.2%) in the ECT group were less than half that of the antidepressant group (18.0% and 5.9%, respectively) and were similar to that of the healthy group. Though it is unknown whether ECT improves

PTSD independently of depression, these results suggest that ECT may have both short- and long-term benefits for some depressed patients with PTSD.

Read the article: http://dx.doi.org/10.1002/da.22451

Ahmadi, N., Moss, L., Simon, E., Nemeroff, C. B., & Atre-Vaidya, N. (2015). Efficacy and long-term clinical outcome of comorbid posttraumatic stress disorder and major depressive disorder after electroconvulsive therapy. *Depression and Anxiety*. Advance online publication. PILOTS ID: 44580